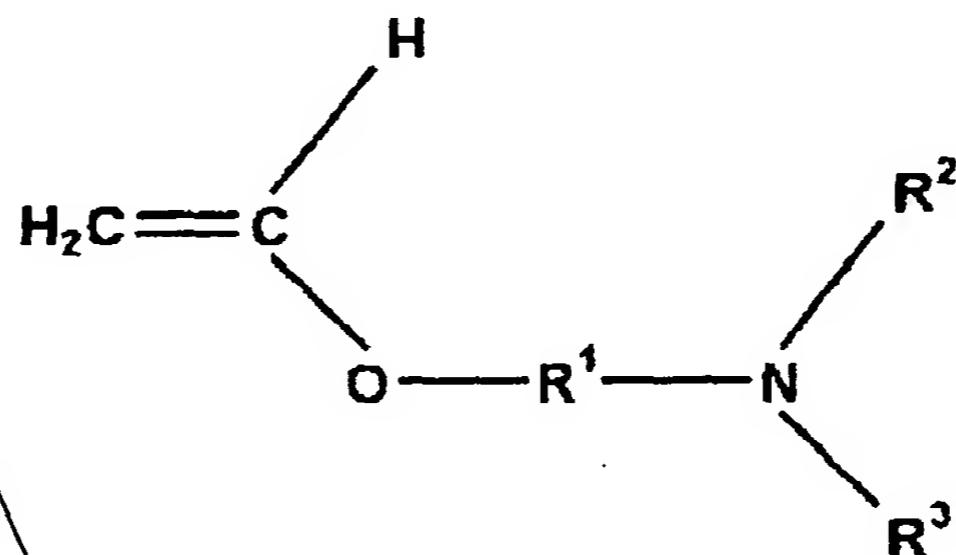


What is claimed is:

5 Sub A, > 1. An antimicrobial copolymer, obtainable by copolymerizing a vinyl ether of the general formula



10 where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and R^2 and R^3 are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R^2 and R^3 may be identical or different,

15 with at least one aliphatically unsaturated monomer.

20 2. An antimicrobial polymer as claimed in claim 1,
wherein
the vinyl ether used comprises 3-aminopropyl vinyl ether.

25 3. An antimicrobial polymer as claimed in claim 1 or 2,
wherein
the aliphatically unsaturated monomers are methacrylic acid compounds.

30 4. An antimicrobial polymer as claimed in claim 1 or 2,
wherein
the aliphatically unsaturated monomers are acrylic acid compounds.

5. An antimicrobial polymer as claimed in claim 1 or 2,
wherein

the aliphatically unsaturated monomers used are methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylaminoethyl vinyl ether, N-3-dimethylamino-propylmethacrylamide, 3-methacryloylaminopropylchloride, 2-methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

10

6. An antimicrobial polymer as claimed in any one of claims 1 to 5, wherein the copolymerization is carried out on a substrate.

15

7. An antimicrobial polymer as claimed in any one of claims 1 to 5, wherein the copolymerization is carried out as a graft polymerization of a substrate.

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8. An antimicrobial polymer as claimed in claim 7, wherein the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ -radiation.

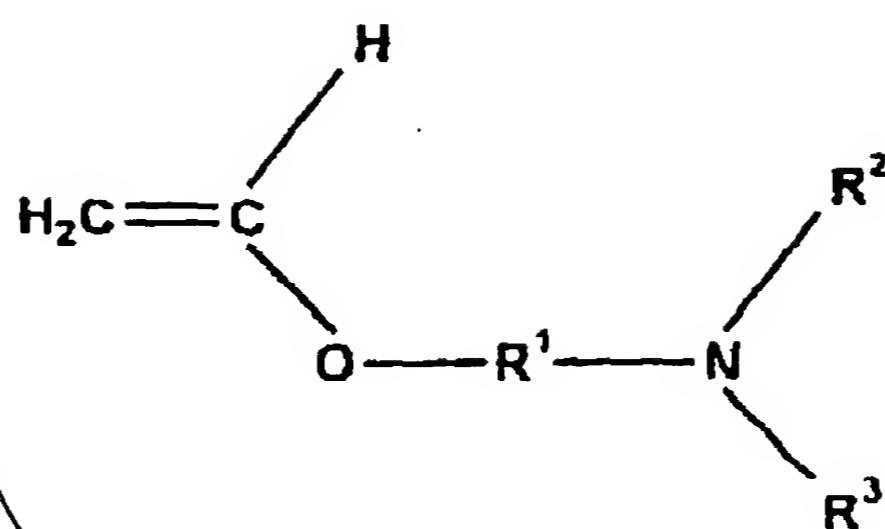
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9. An antimicrobial polymer as claimed in claim 7, wherein the substrate is activated, prior to the graft polymerization, by UV radiation with a photoinitiator.

30

10. A process for preparing antimicrobial copolymers, which comprises copolymerizing a vinyl ether of the general formula

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and

5 R^2 and R^3 are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R^2 and R^3 may be identical or different,

10 with at least one aliphatically unsaturated monomer.

11. The process as claimed in claim 10,
wherein
the vinyl ether used comprises 3-aminopropyl vinyl ether.

15 12. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers are methacrylic acid compounds.

20 13. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers are acrylic acid compounds.

25 14. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers used are methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylaminoethyl vinyl ether, N-3-
30 dimethylaminopropyl-methacrylamide, methacryloylaminopropyltri-methylammonium chloride, 2-

methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

5 15. The process as claimed in any one of claims 10 to 14, wherein the copolymerization is carried out on a substrate.

10 16. The process as claimed in any one of claims 10 to 14, wherein the copolymerization is carried out as a graft polymerization of a substrate.

15 17. The process as claimed in claim 16, wherein the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ -radiation.

20 18. The process as claimed in claim 16, wherein the substrate is activated prior to the graft polymerization by UV radiation with a photoinitiator.

25 19. The use of the antimicrobial polymers as claimed in any of claims 1 to 9 for producing products with an antimicrobial coating of the polymer.

30 20. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 for producing medical items with an antimicrobial coating of the polymer.

35 21. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 for producing hygiene items with an antimicrobial coating of the polymer.

22. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 in surface coatings, protective paints or other coatings.